

WHAT IS CLAIMED IS:

1. Video compression transmission apparatus for compressing a digital video signal and transmitting the  
5 resulting signal, comprising:

a video compression unit for performing compression encoding on an input digital video signal;

a video transmission unit for transmitting to outside  
10 the signal compression-encoded by the video compression unit via a communication line; and

a controller for controlling the operation of the video compression unit and the video transmission unit,

wherein the video compression unit and the video transmission unit are operated in parallel.

15 2. Video compression transmission apparatus according to claim 1,

wherein at least one of a compression encoding process via the video compression unit and a transmission process via  
20 the video transmission unit can be changed by the controller.

3. Video compression transmission apparatus according to claim 2,

wherein the change in the compression encoding process  
25 via the video compression unit includes at least one of a change

in the compression ratio of pictures and a change in the video compression encoding details.

4. Video compression transmission apparatus

5 according to claim 3,

wherein the change in the video compression encoding process includes at least one of a change in the motion vector exploration method and a change in the type of filters applied to pictures and presence/absence of filters.

10 5. Video compression transmission apparatus

according to claim 2,

wherein the change in the transmission process via the video transmission unit includes a change in the type and  
15 bandwidth of the communication line.

6. Video compression transmission apparatus

according to claim 2,

wherein the controller changes at least one of the  
20 compression encoding process via the video compression unit and the transmission process via the video transmission unit depending on a set conditions for a video signal to be compression-encoded.

25 7. Video compression transmission apparatus

according to claim 6,

wherein the set conditions include the allowable range of at least one of the transmission rate, required transmission time and picture quality.

5

8. Video compression transmission apparatus according to claim 6, further comprising:

a processing time measuring unit for measuring the compression encoding time via the video compression unit and the transmission time via the video transmission unit,

wherein the controller changes at least one of the compression encoding process via the video compression unit and the transmission process via the video transmission unit depending on the set conditions and the output of the processing time measuring unit.

9. Video compression transmission apparatus according to claim 2, further comprising:

a video input unit through which a digital video signal input to the video compression transmission is obtained,

wherein the controller controls the operation of the video input unit.

10. Video compression transmission apparatus according to claim 9,

wherein the video input unit includes a video storage unit for storing in advance a digital video signal to be compressed and transmitted.

5        11. Video compression transmission apparatus according to claim 9,

wherein the video input unit comprises a video apparatus controller for supplying a digital video signal from external video apparatus to the video compression unit as required at  
10 a speed equal to or greater than the speed required for the compression encoding via the video compression unit.

12. A video compression transmission method for compressing a digital video signal and transmitting the resulting signal, comprising:

a video compression step of performing compression encoding on an input digital video signal; and

a video transmission step of transmitting to outside the signal compression-encoded by the video compression unit via  
20 a communication line,

wherein the video compression step and the video transmission step are operated in parallel.

13. A video compression transmission method according  
25 to claim 12,

wherein at least one of a compression encoding method via the video compression step and a transmission method via the video transmission step can be changed.

5        14. A video compression transmission method according to claim 13,

          wherein a change in the compression encoding method via the video compression step includes at least one of a change in the compression ratio of pictures and a change in the video compression encoding details.

10        15. A video compression transmission method according to claim 14,

          wherein the change in the video compression encoding includes at least one of a change in the motion vector exploration process and a change in the type of filters applied to pictures and presence/absence of filters.

20        16. A video compression transmission method according to any one of claim 13,

          wherein the change in the transmission process via the video transmission step includes a change in the type and bandwidth of the communication line.

25        17. A video compression transmission method according

to any one of claim 13,

wherein the controller changes at least one of the compression encoding process via the video compression step and the transmission process via the video transmission step  
5 depending on the set conditions for a video signal to be compression-encoded.

18. A video compression transmission method according  
0 to claim 17,

10 wherein the set conditions include the allowable range  
11 of at least one of the transmission rate, required transmission  
12 time and picture quality.

13 19. A video compression transmission method according  
14 to claim 17, further comprising:

15 a processing time measuring step of measuring the  
16 compression encoding time via the video compression step and  
17 the transmission time via the video transmission step,

18 wherein at least one of the compression encoding process  
20 via the video compression step and the transmission method via  
the video transmission unit depending on the set conditions  
and the output of the processing time measuring step.

21 20. A video compression transmission method according  
22 to any one of claim 13, further comprising:

a video input step through which a digital video signal input to the video compression transmission is obtained.

21. A video compression transmission method according  
5 to claim 20,

wherein the video input step includes a video storage step of storing in advance a digital video signal to be compressed and transmitted.

10 22. A video compression transmission method according  
to claim 20,

wherein the video input step includes a step of supplying a digital video signal from external video apparatus to the video compression unit as required at a speed equal to or greater than the speed required for the compression encoding via the  
15 video compression unit.